



## During Maintenance:

- ☐ Perform routine maintenance according to the manufacturer's instructions. Replace oil and filters at recommended times, using an energy-saving grade of motor oil (labeled EC II or Energy Conserving II).
- ☐ Pay attention to a loss in fuel economy. This usually signals an increase in emissions.
- ☐ Black smoke from your tailpipe means there is too much gas in the air/fuel mixture and the fuel injection system should be checked. Blue smoke means the engine is burning oil and excess hydrocarbons are being released.
- ☐ Pay attention to dashboard lights that warn of engine problems.



## When Buying:

- ☐ Check the posted fuel-efficiency rating of the car you intend to buy. Fuel-efficient cars produce lower carbon dioxide emissions per mile.
- ☐ Older vehicles tend to be big polluters. Try to purchase newer vehicles.
- ☐ Low emission vehicles are now available in the Northeast. When looking for a new car, check under the hood for the Vehicle Emissions Control Information label to see that it's a 'clean car'. The cleanest cars available, the 'California' clean car, can be ordered through your dealer.
- ☐ Alternatively fueled vehicles, powered by a variety of fuels, including compressed natural gas, methanol, ethanol and electricity produce lower emissions.

## What Else Is Being Done?

Other measures to control motor vehicle emissions already have been introduced. These include:

- ☐ Special nozzles at the gas pump, which recover gasoline vapors before they can escape into the air.
- ☐ Enhanced inspection and maintenance programs to determine if emission control systems are working properly, including tests for evaporative emissions in newer cars.
- ☐ Various transportation control measures, including mandatory employee trip reduction programs in Southwestern Connecticut and encouragement of mass transit, high occupancy vehicle lanes (HOVs), telecommuting and compressed work weeks.

## For More Information:



Connecticut Department of  
Environmental Protection  
79 Elm Street  
Hartford, CT 06106  
1-800-249-1234

*Connecticut is a member of the Ozone Transport Commission. As a member we work on a regional basis to solve the ozone pollution problem. The Commission is made up of representatives from Connecticut, Delaware, the District of Columbia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, Virginia and the U.S. Environmental Protection Agency.*

# Choose the Road to Clean Air





# Why Are Motor Vehicles a Problem?



Of all your daily activities, driving a car is probably the single most polluting activity you do, according to the U.S. Environmental Protection Agency. If you're a typical American, sliding behind the wheel of your motor vehicle is something you do just about every day, sometimes several times a day. And the consequences of all that driving are serious.

Motor vehicle emissions in Connecticut are the single greatest contributor to ground-level ozone, a major component of smog. Ground-level ozone causes respiratory problems, including coughing, wheezing and shortness of breath, and can lead to permanent lung damage. It is the most serious air pollution problem in the Northeast. Motor vehicles also emit a number of air toxics, which can cause serious health problems, including cancer. Car emissions also contribute to the environmental problems of acid rain and global warming.

The problem could get much worse. Americans drive more than two trillion miles per year, a figure that is double what it was 20 years ago and is still on the rise. If we want to protect the quality of our air and our health, we must make major changes in the vehicles we drive and in our driving habits.

In 1990, Congress enacted the strongest legislation ever to clean up the air. Through amendments to the Clean Air Act, the nation's lawmakers specified how states must meet federal air quality standards. They also established the Ozone Transport Commission, made up of representatives of 12 northeast and mid-Atlantic states, the District of Columbia and the U.S. Environmental Protection Agency, to address the region-wide problem posed by ground-level ozone.

## What Pollutants Do Cars Emit?

Your car generates three major air pollutants: hydrocarbons, oxides of nitrogen and carbon monoxide. Hydrocarbons react with oxides of nitrogen in the presence of sunlight and elevated temperatures to form ground-level ozone. Oxides of nitrogen also contribute to the formation of acid rain and to water quality problems.

Carbon monoxide, a colorless, odorless, deadly gas, can impair mental functions and visual perception. In urban areas, motor vehicles are responsible for as much as 90 percent of the carbon monoxide in the air.

Motor vehicles also emit large amounts of carbon dioxide, which has the potential to trap the Earth's heat and cause global warming.

## How Are These Pollutants Released?

Cars release pollutants from the tailpipe as the result of the fuel combustion process, and from the fuel system through evaporation.

Evaporation occurs:

- ❑ When outside temperatures on hot, sunny days cause the car's fuel to evaporate.

- ❑ When the hot engine and exhaust system of a running car heat the fuel.
- ❑ When the car is shut off and remains hot enough to cause gasoline to evaporate.
- ❑ During refueling, when gasoline vapors escape into the air.

The greatest amounts of tailpipe pollutants are emitted during a car's "cold start" phase, the first few minutes it takes for the vehicle to warm up. Since a car warms up faster when it is driven, you should limit warm-up time.

## What Can You Do to Help?



### When Driving:

- ❑ Reduce the number of vehicle miles traveled by: planning ahead to combine trips, carpooling, using public transportation and working at home.
- ❑ Avoid excessive idling. Idling for more than half a minute burns more gas than it takes to restart the engine. Avoid drive-through windows, take advantage of staggered work schedules and drive during off-peak traffic hours.
- ❑ Travel at steady, moderate speeds (ideally between 35 and 45 mph). Higher speeds result in greater emissions.
- ❑ Have your car emission tested on time. You can get tested 90 days before your sticker date.
- ❑ Make sure that your gas cap fits properly and avoid gasoline spills by not topping off your tank.

